

IN THE DRAWINGS

Replacement drawings for FIGS. 3, 8, and 12 have been included.

REMARKS

Claims 1-13 are pending.

Claims 1-13 are rejected.

Claims 1 and 9 are amended to put them into allowable form.

Claims 2 and 10 are amended add terms to clarify the claims.

Claims 4, 6, 7, and 8 are amended make terms consistent.

The Applicants respectfully assert that the amendments to Claims 2, 4, 6, 7, and 8 and incorporated by reference in any claims depending therefrom, are not narrowing amendments made for a reason related to the statutory requirements for a patent that will give rise to prosecution history estoppel. *See Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 122 S. Ct. 1831, 1839-40, 62 U.S.P.Q.2d 1705, 1711-12 (2002); 234 F.3d 555, 566, 56 U.S.P.Q.2d 1865, 1870 (Fed. Cir. 2001).

I. REJECTION UNDER 35 U.S.C. § 112

The Examiner rejected Claims 2, 3, 10, and 11 under 35 U.S.C. § 112, first paragraph failing to comply with the enablement requirement. The Examiner states that Claims 2 and 10 recite a toothpaste chamber that has a first cap feature for engaging a cap and the specification defines the first cap feature 302 as being positioned on the head 101 but not on the toothpaste chamber 105.

The Applicant has amended Claims 2 and 10 adding "the toothbrush head has" between the word "and" and "a first cap feature" to clarify that the toothbrush head and not the toothbrush chamber has the cap feature. This is shown in the original and the replacement drawing for FIG. 3 where cap feature 302 (raised circumferential section) is shown on the cross-section of toothbrush head 101. Cap feature 302 is more clearly shown in FIG. 10C. FIG. 11C shows the mating feature 1102 on cap 109 for mating with cape feature 302.

Therefore the Applicant respectfully asserts that the rejections of Claims 2, 3, 10, and 11 under 35 U.S.C. § 112, first paragraph are traversed by these amendments to Claims 2 and 10 and the FIG. 3.

The Examiner rejected Claims 8 under 35 U.S.C. § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Claim 8 is dependent from Claim 6 and thus from Claim 1 and recites the limitation that the toothbrush assembly of Claim 1 further comprises a "twist knob" corresponding to the exposed portion of the plunger assembly. The Applicant asserts that, according to the dictionary, "corresponding" means equivalent, matching or analogous to, therefore it follows that the "twist knob" is the exposed portion of the plunger assembly. Referring to FIG. 2, the plunger assembly 200 is shown to include

twist knob 103. Most of plunger assembly 200, plunger head and plunger body 204 reside in toothpaste chamber 105 or inside of twist knob 103. Therefore, it follows that the exposed portion of the plunger assembly 200 is the twist knob 103 as recited in Claim 8. The Applicant respectfully asserts that exposed portion of the plunger assembly is defined clearly by the Specification and FIG. 2.

Therefore Applicant respectfully asserts that the rejection of Claims 8 under 35 U.S.C. § 112, second paragraph is traversed by the above arguments.

II. REJECTION UNDER 35 U.S.C. § 102(b)

The Examiner rejected Claims 1 and 9 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 1,498,439 *Flom* (hereafter "*Flom*").

The Applicant has amended Claims 1 and 9 to include limitations recited in the Specification page 5, lines 10-15 to differentiate these claims from the cited prior art. The Application added the limitation that the plunger assembly includes the plunger head that is configured to impart pressure and vacuum on a portion of the toothpaste chamber in response to rotating an exposed portion of the plunger assembly. Further, these claims are amended to include the limitation that the toothpaste chamber is only filled by coupling a toothpaste tube containing toothpaste to the brush end when the plunger head is moved a lateral distance towards the brush end reducing a volume of the portion of the toothpaste chamber and then moved laterally towards the plunger end expanding the volume of the portion of the toothpaste chamber to create a vacuum that extracts toothpaste from the toothpaste tube into the portion of the toothpaste chamber. The Applicant respectfully asserts that the reference *Flom* does not teach or suggest this novelty and in fact shows removing his plunger assembly to fill the toothpaste tube from the open plunger end.

Therefore, the Applicant respectfully asserts that rejections of Claims 1 and 9 under 35 U.S.C. § 102(b) as being anticipated by *Flom* are traversed by the amendments to these claims and the above arguments.

III. REJECTION UNDER 35 U.S.C. § 103

The Examiner rejected Claims 2, 3, 10, and 11 under 35 U.S.C. § 103(b) as being unpatentable over *Flom* in view of the Examiner's official notice that O-rings are commonly employed onto threaded caps in order to render the cap sealed to the chamber.

Claim 2 is dependent from Claim 1 and contains all the limitations of Claim 1. Claim 10 is dependent from Claim 9 and adds the same limitation to Claim 9 as Claim 2 adds to Claim 1. The Applicant has shown that amended Claims 1 and 9 are distinctly different from the cited prior art *Flom* and as such the Applicant asserts Claims 1 and 9 are in allowable form. Claims 2 and 10 are amended and add the limitation that the brush end of the toothpaste chamber in Claims 1 and 9 have a circumferential slot for receiving an O-ring and the toothbrush head has a first cap feature for engaging and retaining a cap placed over the toothbrush head. The Applicant asserts that Claims 1 and 9 are now in allowable form and therefore Claims 2 and 10 which further limit Claims 1 and 9 are also in allowable form.

Further, the Applicant asserts that *Flom* has a toothbrush assembly with a cap that couples to the toothpaste chamber by action of mating threads. Nowhere does *Flom* state or suggest that an O-ring could be incorporated into is screw-on cap nor does *Flom* state that his dispensing device needs any feature on his cap to prevent leakage. The present invention discloses a snap-on cap wherein an O-ring is incorporated in a slot on the brush end of the toothpaste chamber to facilitate sealing of the cap to prevent leakage. Incorporating an O-ring into the invention of *Flom* requires the design of *Flom* to be modified in a manner not described by *Flom* nor the Examiner. The Applicant asserts

that one cannot simply add a slot for an O-ring, as disclosed in the present invention, to the design of Flom. The Applicant asserts therefore that the Examiner has failed to make a prima facie case of obviousness in rejecting Claims 2 and 10 over *Flom* in view of his Official Action.

Therefore, the Applicant respectfully asserts that rejection of Claims 2 and 10 under 35 U.S.C. § 103(a) as being unpatentable over *Flom* in view of Examiner's Official Action is traversed by the above arguments and for the same reasons as Claims 1 and 9.

Claim 3 is dependent from Claim 2 and contains all the limitations as Claim 2. Claim 11 is dependent from Claim 10 and contains all the limitations as Claim 10. Claims 3 and 11 add a second cap feature for coupling with the first cap feature and an inside surface of the cap seals against the O-ring. The Applicant has shown that incorporating an O-ring into the invention of Flom requires the design of Flom to be modified in a manner not described by Flom nor the Examiner. The Applicant asserts that one cannot simply add a slot for an O-ring, as disclosed in the present invention, to the design of Flom. The Applicant asserts therefore that the Examiner has failed to make a prima facie case of obviousness in rejecting Claims 2 and 10 over *Flom* in view of his Official Action.

Therefore, the Applicant respectfully asserts that rejections of Claims 3 and 11 under 35 U.S.C. § 103(a) as being unpatentable over *Flom* in view of Examiner's Official Action are traversed by the above arguments and for the same reasons as Claims 1, 2, 9 and 10.

The Examiner rejected Claims 4, and 12 under 35 U.S.C. § 103(b) as being unpatentable over *Flom* in view of the U. S. Patent 1,192,668 to Miles hereafter ("Miles").

Claim 4 is dependent from Claim 1 and contains all the limitations of Claim 1. Claim 12 is dependent from Claim 9 and adds the same limitation to Claim 9 as Claim 4 adds to Claim 1. The Examiner admits that Flom does not teach the limitation of Claims 4 and 12. The Applicant has shown that Flom does not teach or suggest the inventions in amended Claims 1 and 9. The Examiner does not state that Miles teaches or suggests the inventions of Claims 1 and 9. Therefore, the Applicant respectfully asserts that Flom and Miles, singly or in combination, do not teach or suggest the inventions of Claims 4 and 12.

Therefore, the Applicant respectfully asserts that rejections of Claims 4 and 12 under 35 U.S.C. § 103(a) as being unpatentable over *Flom* in view of Miles are traversed by the above arguments and for the same reasons as Claims 1 and 9.

The Examiner rejected Claims 5 and 13 under 35 U.S.C. § 103(b) as being unpatentable over *Flom* in view of the U. S. Patent 499,612 to Tower hereafter ("Tower").

Claim 5 is dependent from Claim 1 and contains all the limitations of Claim 1. Claim 13 is dependent from Claim 9 and adds the same limitation to Claim 9 as Claim 5 adds to Claim 1. The Examiner admits that Flom does not teach the limitation of Claims 5 and 13. The Applicant has shown that Flom does not teach or suggest the inventions in amended Claims 1 and 9. The Examiner does not state that Tower teaches or suggests the inventions of Claims 1 and 9. Therefore, the Applicant respectfully asserts that Flom and Tower, singly or in combination, do not teach or suggest the inventions of Claims 5 and 13.

Therefore, the Applicant respectfully asserts that rejections of Claims 5 and 13 under 35 U.S.C. § 103(a) as being unpatentable over *Flom* in view of Tower are traversed by the above arguments and for the same reasons as Claims 1 and 9.

The Examiner rejected Claims 6-8 under 35 U.S.C. § 103(b) as being unpatentable over *Flom* in view of the U. S. Patent 6,752,558 to Hsu hereafter ("Hsu").

Claim 6 is dependent from Claim 1 and contains all the limitations of Claim 1. The Applicant has shown that *Flom* does not teach or suggest the invention in amended Claim 1. The Examiner admits that *Flom* does not teach or suggest the plunger assembly as claimed in Claim 6. The Examiner does not state that Hsu teaches or suggests the invention in amended Claim 1. Rather, the Examiner states that the liquid lipstick dispensing device of Hsu teaches the plunger assembly recited in Claim 6. While the plunger assembly of Hsu has similarities to the plunger assembly of Claim 6, Hsu does not teach the invention of amended Claim 1 with the limitation of Claim 6. Imparting both pressure and vacuum to the toothpaste chamber in response to rotating the twist knob in the present invention requires the plunger assembly to move the plunger head in both directions while maintaining a seal between the plunger head and an inside surface of the toothpaste chamber. The Applicant has shown that *Flom* does not teach or suggest the invention amended Claim 1. In reference Hsu, column 4, lines 18-25, it is stated that "the sleeve 70 includes one or more projections or ratchet teeth 74 extended downwardly therefrom, for engaging with swellings 67 of the duct 60 (nut) and for preventing the barrel 50 (twist knob) from being rotated reversely relative to the housing 10 (toothpaste chamber). Clearly, since Hsu prevents his "twist knob" from rotating in both directions, he teaches away from the invention of Claim 1 which requires rotating the twist knob in both directions to impart pressure and vacuum to the toothpaste chamber.

The toothbrush assembly of claim 1, wherein the removable plunger assembly comprises a plunger body having a head end coupled to the plunger head and a shaft section with a non-circular cross-section extending from the head end to a tail end, wherein the shaft section of the plunger body has plunger threads disposed on directly opposing surface areas corresponding to a circular circumference intersecting and tangential to the opposing surface areas.

Therefore, the Applicant respectfully asserts that rejection of Claim 6 under 35 U.S.C. § 103(a) as being unpatentable over *Flom* in view of Hsu are traversed by the above arguments and for the same reasons as Claim 1.

Claim 7 is dependent from Claim 6 and contains all the limitations of Claim 6. Claim 7 adds the limitation that a nut is threaded from the tail end onto the plunger threads of the shaft section of the plunger body to a stop corresponding to a flange on the head end, the nut engaging a stop surface on the flange determining how far the plunger assembly extends into the toothpaste chamber, wherein features of the nut engage features of the toothpaste chamber to prevent the nut from rotating relative to the toothpaste chamber. The Examiner does not specifically address Claim 7. The Applicant has shown that neither *Flom* nor Hsu, singly or in combination, do not teach or suggest the invention of Claim 6. Therefore, Claim 7 which adds further limitations to Claim 6 is also not taught or suggested by *Flom* or Hsu, singly or in combination.

Therefore, the Applicant respectfully asserts that rejection of Claim 7 under 35 U.S.C. § 103(a) as being unpatentable over *Flom* in view of Hsu are traversed by the above arguments and for the same reasons as Claims 1 and 6.

Claim 8 is dependent from Claim 7 and contains all the limitations of Claim 7. Claim 8 adds limitations reciting in detail how the toothpaste chamber is pressurized and evacuated. The Examiner does not specifically address Claim 8. The Applicant has shown that neither *Flom* nor Hsu, singly or in combination, do not teach or suggest the inventions of Claims 6 or 7. Therefore, Claim 8 which adds further limitations to Claim 7 is also not taught or suggested by *Flom* or Hsu, singly or in combination.

Therefore, the Applicant respectfully asserts that rejection of Claim 8 under 35 U.S.C. § 103(a) as being unpatentable over *Flom* in view of Hsu are traversed by the above arguments and for the same reasons as Claims 1, 6, and 7.

IV. CONCLUSION

Claims 1 and 9 have been amended to distinguish from the cited prior art.

Claims 2, 4, 6-10, and 12 have been amended to correct informalities as suggested by the Examiner.

As a result of the foregoing, the Applicants respectfully assert that Claims 1-13 are in condition for allowance.

Applicants respectfully request that the Examiner call Applicants' attorney at the below listed number if the Examiner believes that such a discussion would be helpful in resolving any remaining problems.

Respectfully submitted,

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